

# BIRTH CONTROL OPTIONS

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# Types of Birth Control

- ◆ Periodic Abstinence
- ◆ Barrier Methods
- ◆ Abortion
- ◆ Permanent Sterilization
- ◆ IUD
- ◆ Long Acting Steroid Methods
- ◆ Oral Contraceptives

# Failure Rates During First Year of Use, United States, 1990 Data

- ◆ No Method 50%
- ◆ Abstinence 20%
- ◆ Diaphragm 18%
- ◆ Male Condom 12%
- ◆ IUD 1-3%
- ◆ Permanent sterilization 1%
- ◆ Steroids: Implants and Injectables <1%
- ◆ Steroids: Oral 1%

# INTRAUTERINE DEVICES

The background is an abstract composition of various shades of brown. It features a large circle on the right side, a vertical line, and several diagonal lines. There are also some solid brown shapes, including a triangle in the top left and a rectangle in the bottom right.

# INTRAUTERINE DEVICES

- ◆ High efficacy
- ◆ No systemic side effects
- ◆ Excellent safety profile
- ◆ Long duration of efficacy
- ◆ Single motivational act
- ◆ Not related to coitus

# INTRAUTERINE DEVICES

- ◆ Can use in patients with Br Ca, Venous thromboembolism, Arterial vascular dz, Active liver dz, Smokers > 35
- ◆ Not contraindicated if DM, Valvular heart dz, Treated Cx Dysplasia, Breast-feeding, Age<25, Irregular menses from anovulation

# Types of Intrauterine Devices

- ◆ Paragard Copper T 380A
- ◆ Progestasert

# Mechanism of Action of IUD

## *PARAGUARD COPPER T380A*

- ◆ SPERMICIDAL
- ◆ 10 year duration
- ◆ COST \$320.00



# Mechanism of Action of IUD

## *PROGESTASERT* *Progesterone-Releasing*

- ◆ Tubal motility decreased, thicken cervical mucous
- ◆ 1 year duration
- ◆ COST \$125

# Recommended Patient Profile for IUD Placement

- ◆ Stable, Mutually Monogamous Relationship
- ◆ No history of PID, low risk STD
- ◆ Has at least one child
- ◆ Normal recent cervical cultures and recent pap smear
- ◆ Normal uterine anatomy
- ◆ No ongoing infection or aub of unknown etiology or malignancy

# Procedure for Insertion

- ◆ Consent Patient
- ◆ Perform Hx and PE, appropriate tests (recent pap/cx cultures)
- ◆ Sound uterus
- ◆ Sterile technique
- ◆ Insert IUD
- ◆ Remove Plunger and introducer catheter; Cut String
- ◆ Set up follow up

# Side Effects and Complications of IUD

- ◆ Irregular Bleeding
- ◆ Cramping
- ◆ Migration and Perforation
- ◆ Scarring, infection, infertility
- ◆ Expulsion

# Expulsions

- ◆ Frequency 5%
- ◆ Most occur in first year of use
- ◆ Skilled clinician with good insertion techniques minimizes the risk
- ◆ One third of expulsions are not noticed by patient; check string after ending menses

# Partial Expulsion

- ◆ Patient may note uterine cramping
- ◆ Tail may appear longer
- ◆ Patient or partner may notice part of device protruding through the cervix
- ◆ IUD should be removed
- ◆ If no infection or pregnancy, a new IUD can be inserted

# Long-Acting Steroid Methods

# Long-Acting Steroid: Norplant

- ◆ 6 Silastic capsules, each 34mm long with levonorgestrel inserted subdermally under local anesthesia
- ◆ Works by suppressing LH so ovulation doesn't occur, thickens cervical mucus, thins lining of the endometrial cavity
- ◆ About 80ug levonorgestrel per 24h in first 6-12 months, then 30-35ug. After 5 years, 25ug...too low...increased pregnancy rates



# Long-Acting Steroid: Norplant

- ◆ ***Advantages:*** safe, effective (use effectiveness equals theoretical effectiveness), can be used by women with contraindications for estrogen-containing OCPs
- ◆ ***Disadvantages:*** bleeding, insertion and removal require minor surgical procedure, cost, no STD protection

# Long-Acting Steroid: Norplant

- ◆ ***Indications:*** desires long-term effective BC that can be reversed, chronic illness with pregnancy a health threat...
- ◆ ***Contraindications:*** ACUTE liver disease, ACTIVE thrombophlebitis or thromboembolic disease, Breast Ca, Undiagnosed bleeding, liver tumors

# Long-Acting Steroid: Norplant

- ◆ Side effects include weight gain, mastalgia, galactorrhea, acne, ovarian cysts, surgical complications, migration of capsule(s)
- ◆ Most women return to normal ovulatory cycles during the first month after removal

# Long-Acting Steroid: Depoprovera

- ◆ Depot intramuscular administration of medroxyprogesterone acetate
- ◆ 150mg IM every three months, effective level is maintained for four months, providing safety margin
- ◆ Mechanism completely blocks LH surge, therefore about 100% anovulatory cycles, thickens cervical mucus, thins endometrial lining

# Long-Acting Steroid: Depoprovera

- ◆ Side effects include weight gain, breast tenderness, irregular menstrual bleeding and depression; associated with increased incidence of endocervical dysplasia, pap smear needed
- ◆ Serious weight gain and depression (less than 5% incidence) are not relieved until the drug clears the body in about 6-8 months
- ◆ Stabilizes RBC, good form of BC for sickle cell anemia patients

# Oral Contraceptive Pills

- ◆ **Types of Pills: Combination, Phasic, Progestin Only**
- ◆ **Components of Pills: Estrogen is Ethinyl Estradiol, Progestins vary by degree of androgenicity**
- ◆ **Mechanism of Action: Inhibit FSH and LH, both hypothalamic and pituitary actions; thickens cervical mucus, thins endometrial lining**

# Oral Contraceptive Pills

- ◆ There are many noncontraceptive benefits
- ◆ ***Absolute Contraindications:*** thromboembolic disorder, CVA, Liver fnc't abnl, Breast CA, undx Abnl menstrual bleeding, pregnancy, smoker over age 35
- ◆ ***Relative Contraindications*** are few

# Oral Contraceptive Pills

- ◆ Estrogen side effects include nausea, increase breast size, fluid retention, rise in cholesterol, fibroid growth, potential dvt...
- ◆ Progestin side effects include breast tenderness, headache, depression, acne, appetite increase, libido effects, hirsutism



# Oral Contraceptive Pills

- ◆ Compliance is partly under the prescriber's control....educate patient well
- ◆ 3 month trial is the goal before switching types
- ◆ Common problems include breakthrough bleeding, amenorrhea, weight gain, headaches, interference of efficacy by some drugs

# Common Problems with OC Birth Control

- ◆ Breakthrough bleeding
- ◆ Nausea, breast tenderness
- ◆ Androgenic side effects like acne, hirsutism, oily skin, weight gain
- ◆ Missed Pills